

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims, as follows:

1-28. (Canceled)

29. (Previously Presented) A method of arranging communication between an administrator device and an administered device in a network, comprising the steps of:

arranging said communication in the form of a chain of digitally signed communication items including messages sent from an originator device to a recipient device, each said message having associated a respective digitally signed receipt; and

configuring said originator device not to send a new item toward said recipient device in the absence of a respective digitally signed receipt for a previously sent item.

30. (Previously Presented) The method of claim 29, comprising the steps of:

detecting at said originator device a respective digitally signed receipt item from said recipient device having failed to reach the originator device within a given time span after a message item has been issued by said originator device; and

asking said recipient device for a signed statement indicating at least one of a last message item received and a last message item sent by said recipient device.

31. (Previously Presented) The method of claim 29, comprising the step of storing with at least one of said administrator devices and said administered devices, a history record of communication items exchanged therebetween, said history record being agreed upon and signed by both said administrator device and said administered device.

32. (Previously Presented) The method of claim 29, comprising the step of carrying out at said originator device a session closing step mentioning at least one of a last message item received and a last message item sent by said recipient device.

33. (Previously Presented) The method of claim 29, comprising the step of keeping with said originator device an indication of an on-going communication session as a pending session until a signed receipt item is received from said recipient device.

34. (Previously Presented) The method of claim 29, comprising the step of inserting in said communication items, payload data and administrative commands accompanied by respective digital signatures.

35. (Previously Presented) The method of claim 29, comprising the step of causing said recipient device to verify digital signatures for validity.

36. (Previously Presented) The method of claim 29, comprising the step of creating digital signatures under the full control of the device issuing such signatures.

37. (Previously Presented) The method of claim 29, comprising the step of associating secure digital signature evidence with said digitally signed messages and receipts.

38. (Previously Presented) The method of claim 37, wherein said secure digital signature evidence is in the form of RSA class digital signatures.

39. (Previously Presented) The method of claim 29, comprising the steps of arranging communication between a set of administrator devices and a given administered device and permitting at least one administrator device in said set to hide its identity to said administered device.

40. (Previously Presented) The method of claim 39, comprising the step of hiding the identity of said at least one administrator device to said administered device by using at least one of group signatures or pseudonym digital certificates.

41. (Previously Presented) The method of claim 39, comprising the step of resuming a session interrupted in the absence of a receipt provided by said at least one administrator hiding its identity to a message sent by said given administered device, wherein said session is resumed by said at least one administrator hiding its identity.

42. (Currently Amended) A system of comprising an administrator device and an administered device in a network, said administrator device and administered device being configured for communication in the form of a chain of digitally signed communication items including messages sent from an originator device to a recipient device, each said message having associated a respective digitally signed receipt, and wherein said originator device is configured not to send a new item toward said recipient device in the absence of a respective digitally signed receipt for a previously sent item.

43. (Previously Presented) The system of claim 42, wherein:
said originator device is configured for detecting a respective digitally signed receipt item from said recipient device having failed to reach the originator device within a given time span after a message item has been issued by said originator device; and

asking said recipient device for a signed statement indicating at least one of a last message item received and a last message item sent by said recipient device.

44. (Currently Amended) The system of claim 42, comprising, further comprising data items stored with at least one of said administrator device and said administered device, and comprising a history record of communication items exchanged therebetween, said history record being agreed upon and signed by both said administrator device and said administered device.

45. (Previously Presented) The system of claim 42, wherein said originator device is configured for carrying out a session closing step mentioning at least one of a last message item received and a last message item sent by said recipient device.

46. (Previously Presented) The system of claim 42, wherein said originator device is configured for keeping an indication of an on-going communication session as a pending session until a signed receipt item is received from said recipient device.

47. (Previously Presented) The system of claim 42, wherein said originator device is configured for inserting in said communication items payload data and administrative commands accompanied by respective digital signatures.

48. (Previously Presented) The system of claim 42, wherein said recipient device is configured for verifying said digital signatures for validity.

49. (Previously Presented) The system of claim 42, comprising means for creating said digital signatures, said means being assigned acting under the full control of the device issuing such signatures.

50. (Currently Amended) The system of claim 42, wherein there is a configuration for associating secure digital signature evidence is associated with said digitally signed messages and receipts.

51. (Previously Presented) The system of claim 50, wherein said secure digital signature evidence is in the form of RSA class digital signatures.

52. (Previously Presented) The system of claim 42, comprising a set of administrator devices and a given administered device, wherein at least one administrator device in said set is configured to hide its identity to said administered device.

53. (Previously Presented) The system of claim 52, wherein said at least one administrator device is configured for hiding its identity to said administered device by using at least one of group signatures or pseudonym digital certificates.

54. (Previously Presented) The system of claim 52, wherein said at least one administrator hiding its identity is configured for resuming a session interrupted in the absence of a receipt provided by said at least one administrator hiding its identity to a message sent by said given administered device.

55. (Currently Amended) A communication network comprising an administrator device and an administered device in a network, said administrator device and administered device being configured for communication in the form of a chain of digitally signed communication items including messages sent from an originator device to a recipient device, each said message having associated a respective digitally signed receipt, and wherein said originator device is configured not to send a new item toward said recipient device in the absence of a respective digitally signed receipt for a previously sent item. ~~a system according to any one of claims 42-54.~~

56. (Currently Amended) A computer program product, loadable in the memory of at least one computer, and comprising software code portions capable of performing the steps of a method of arranging communication between an administrator device and an administered device in a network, the method comprising:
arranging said communication in the form of a chain of digitally signed communication items including messages sent from an originator device to a recipient device, each said message having associated a respective digitally signed receipt; and

configuring said originator device not to send a new item toward said recipient device in the absence of a respective digitally signed receipt for a previously sent item. ~~the method of any one of claims 29-41.~~